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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/690,694	10/16/2000	YUJI TAKAMIZAWA	P5285A	3266
20178	7590	07/18/2006	EXAMINER	
EPSON RESEARCH AND DEVELOPMENT INC INTELLECTUAL PROPERTY DEPT 150 RIVER OAKS PARKWAY, SUITE 225 SAN JOSE, CA 95134			NGUYEN, MADELEINE ANH VINH	
			ART UNIT	PAPER NUMBER
			2625	

DATE MAILED: 07/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/690,694	Applicant(s) TAKAMIZAWA ET AL.	
	Examiner Madeleine AV Nguyen	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 and 21-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 and 21-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 27, 2006 has been entered.

Applicant cancels claims 19, 20, and 24-27, and amends claims 1, 2, 8, 21.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-18, 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akiyama et al (US Patent No. 5,594,653) in view of Kim (US Patent No. 5,885,010).

Concerning claims 1 and 21, Akiyama et al discloses a printer (printing apparatus side, Fig.1) adapted to be connected to a host computer (61, Fig.2) and to receive data including control commands from the host computer comprising a receive buffer (65) for temporarily storing received data; a data interpreter (66) for interpreting the data in the receive buffer; control means (68) responsive to the data interpreter for controlling the printer; state detection means

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(71-76) for detecting whether the printer is in a first state (off-line or when an error occurs) in which data is received and the received data is not printed, or in a second state (on-line) in which data is received and the received data is printed; clearing means (Table 1 when $n=8$) for clearing the received buffer, characterized in that the clearing means is responsive to the state detection means for clearing the receive buffer in response to the printer entering said first state (Figs. 7-8; Abstract; col. 8, lines 21-54; col. 13, line 1 - col. 14, line 20; col. 15, lines 31-67; col. 16, line 60 – col. 18, line 18).

Akiyama fails to teach the automatically clearing the receive buffer immediately after the state detection means detecting the first state without need of a real-time buffer clearing command from the computer. Kim discloses a printer connected to a host computer for receiving from and transmitting data to the computer. The printer comprises a receive buffer for temporarily storing received data (40), a data interpreter (100), a state detection means (100) for detecting whether the printer is in a first state in which data is received and the received data is not printed (detecting the state of the forced stop switch 20 to be activated in order to stop the printing operation when the data transmitted to the printer contain errors), or in a second state in which data is received and the received data is printed (when the data transmitted to the printer do not contain errors or the forced stop switch is not activated). Kim further teaches that the central processing unit 100 detecting and verifying whether said forced stop switch has been activated, if yes, it “immediately stopping transference of printing media to paper” in response to verification of the activation of the forced stop switch and clear the received data stored in RAM 40 according to a stop program stored in ROM 50 (Fig.2; col. 3, lines 9-37; col. 4, lines 28-38). Kim further teaches that, when the central processing unit 100 receives the signal to stop the

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printing operation (S1), it transmits an error signal back through the communication port 30 to the computer in order to interrupt the data transfer (S2) and then clear the received data stored in RAM 40 without a need of a real-time buffer clearing command from the computer (Fig.2, col. 3, lines 26-45). It would have been obvious to one skilled in the art at the time the invention was made to combine the above teaching of Kim in the clearing means in Akiyama since both of them teach the same field of endeavor wherein printing modes are set for different cases including the cases of stopping the print operation and clearing the received data stored in a buffer (off-line mode).

Concerning claims 2-5, 6, 7, 22, 23, Makino et al further teaches a setting means (69 and 77 Fig.5) for setting data handling mode that determines how data are handled when the printer is in the first state (off-line state); and reading means (73) for reading the data handling mode in response to the printer entering the first state; wherein the clearing means is adapted to clear the receive buffer only when the data handling mode is set (n=8) to allow clearing of the receive buffer (claims 2, 22), (122, Fig.7; 146, Fig.8; 112, Fig.10); the setting means is adapted to set the data handling mode in response to a specific control command from the host computer (2), (claim 3), (col. 15, lines 30-65; col. 16, line 62 – col. 17, line 25); a data discarding means for discarding print data and not discarding command data received from the host computer while the printer is in the first state (off-line state), (claims 4, 23), (132, Fig.8; col. 15, lines 30-65; col. 16, line 62 – col. 17, line 25); the data discarding means is adapted to discard data only when the data handling mode is set to allow discarding the data received from the host computer, (claim 5), (col. 13, line 1 - col. 14, line 20; col. 15, lines 31-67; col. 16, line 60 – col. 18, line 18); a print buffer (67) for storing expanded print data wherein the clearing means is adapted to clear

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both the receive buffer and the print buffer (claim 6), (col. 14, lines 1-6); the first state is an off-line state in which the data interpreter does not interpret received print data and does interpret received command data, and the second state is an on-line state in which the data interpreter interprets received data, (claim 7), (Abstract; col. 15, lines 30-65; col. 16, line 62 – col. 17, line 25).

Claim 8 is method claim of apparatus claim 1. Claim 8 is rejected for the same rationales set forth for claim 1 above.

Concerning claims 9-18, Akiyama et al further teaches that the clearing step is accomplished immediately after the first state is detected, (claim 9), (146, Fig.6; col. 14, lines 1-6); setting a data handling mode so as to either allow or not allow clearing of the received buffer (col. 13, line 34 – col. 14, line 6); reading the data handling mode in response to detection of the first state, wherein the clearing step comprises clearing the receive buffer only when the data handling mode read in step reading allows clearing of the receive buffer, (claim 10), (col. 13, line 34 – col. 14, line 6; col. 16, line 62 – col. 17, line 22); the setting step is accomplished according to a specific control command from a host computer 2, (claim 11), (col. 13, line 34 – col. 14, line 6; col. 16, line 62 – col. 17, line 22); a step of discarding data received from a host computer after the receive buffer was cleared and until detecting step detects the second state, (claim 12), (Figs.7, 8, 10; col. 13, line 21 – col. 14, line 25; col. 15, lines 30 –65); the step of discarding data comprises discarding data only when the data handling mode read in reading step further allows discarding the data received from the host computer, (claim 13), (Figs.7, 8, 10; col. 13, line 21 – col. 14, line 25; col. 15, lines 30 –65; col. 16, line 60 -,col. 17, line 25); a step of saving in the receive buffer data received from the host computer after the receive buffer was cleared in the

clearing step and until the detecting step detect the second state, (claim 14), (Figs.7, 8, 10; col. 13, line 21 – col. 14, line 25; col. 15, lines 30 –65; col. 16, line 60 -,col. 17, line 25); a step of clearing the receive buffer when the second state is detected in the detecting step after the first state had been detected, (claim 15), (Figs.7, 8, 10; col. 13, line 21 – col. 14, line 25; col. 15, lines 30 –65; col. 16, line 60 -,col. 17, line 25); a clearing mode for clearing received data or contents stored in the memory, (claim 16-17), (Figs.7, 8, 10, 13), the first state is an off-line state and the second state is an on-line state, (claim 18), (col. 16, line 60 – col. 17, line 25).

Conclusion

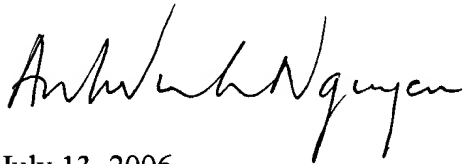
4. Claims 1-18, 21-23 are rejected.
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Madeleine AV Nguyen whose telephone number is 571 272-7466. The examiner can normally be reached on Tuesday-Thursday 12:30-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on 571 272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

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like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read "Madeleine AV Nguyen". The signature is fluid and cursive, with the first name "Madeleine" and last name "Nguyen" being more distinct than the middle initials "AV".

July 13, 2006

Madeleine AV Nguyen
Primary Examiner
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